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| 10/612,343                       | 07/03/2003    | Elena Lialiamou      | 59643.00208             | 3765            |  |
| 32294 75                         | 90 11/30/2005 |                      | EXAM                    | EXAMINER        |  |
| SQUIRE, SANDERS & DEMPSEY L.L.P. |               |                      | PHUON                   | PHUONG, DAI     |  |
| 14TH FLOOR<br>8000 TOWERS        | CRESCENT      | ART UNIT             | PAPER NUMBER            |                 |  |
| TYSONS CORNER, VA 22182          |               |                      | 2688                    |                 |  |
|                                  |               |                      | DATE MAILED: 11/30/2003 | 5               |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Applic   | ation No.   | Applicant(s)  | Applicant(s) |  |  |  |  |
|--|---|--|---|---|--------------|--|--|--|--|
| Office Action Summary                                |   |  | 2,343   | LIALIAMOU ET A  | AL.          |  |  |  |  |
|  |   |  | ner   | Art Unit  |              |  |  |  |  |
|  |   | Dai A.   | Phuong  | 2688  |              |  |  |  |  |
| Period fo  | The MAILING DATE of this communicator Reply   | ation appears on   | the cover sheet   | with the correspondence a   | ddress       |  |  |  |  |
| WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any | ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAINSIONS of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum statuture to reply within the set or extended period for reply will reply received by the Office later than three months after ed patent term adjustment. See 37 CFR 1.704(b). | LING DATE OF<br>37 CFR 1.136(a). In no<br>ication.<br>ory period will apply an<br>I, by statute, cause the | THIS COMMUN<br>o event, however, may<br>nd will expire SIX (6) M<br>application to become | NICATION. a reply be timely filed  ONTHS from the mailing date of this ABANDONED (35 U.S.C. § 133). |              |  |  |  |  |
| Status   |   |  |   |   |              |  |  |  |  |
| 1)⊠  | Responsive to communication(s) filed  | on 18 October 2  | 2005.   |   | •            |  |  |  |  |
| 2a)⊠   |   | )∐ This action i   |   |   |              |  |  |  |  |
|  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |   |   |              |  |  |  |  |
| ,—   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |   |   |              |  |  |  |  |
| Disposit   | ion of Claims   |  |   |   |              |  |  |  |  |
| 4)⊠  |   |  |   |   |              |  |  |  |  |
| •  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |   |   |              |  |  |  |  |
| 5)   | Claim(s) is/are allowed.  |  |   |   |              |  |  |  |  |
| 6)⊠  | ☐   |  |   |   |              |  |  |  |  |
| 7)🖂  | Claim(s) 29 is/are objected to.   |  |   |   |              |  |  |  |  |
| 8)   | Claim(s) are subject to restriction   | on and/or electio  | n requirement.  |   |              |  |  |  |  |
| Applicat   | ion Papers  |  |   |   |              |  |  |  |  |
| 9)[  | The specification is objected to by the E   | Examiner.  |   |   |              |  |  |  |  |
| 10)🛛   | The drawing(s) filed on 03 July 2005 is   | /are: a)⊠ acce <sub>l</sub>  | oted or b)□ obj   | ected to by the Examiner.   |              |  |  |  |  |
|  | Applicant may not request that any objection  | on to the drawing(   | s) be held in abey  | vance. See 37 CFR 1.85(a).  |              |  |  |  |  |
|  | Replacement drawing sheet(s) including th   | e correction is rec  | quired if the drawir  | ng(s) is objected to. See 37 C  | FR 1.121(d). |  |  |  |  |
| 11)  | The oath or declaration is objected to b  | y the Examiner.  | Note the attach   | ed Office Action or form P  | TO-152.      |  |  |  |  |
| Priority (   | under 35 U.S.C. § 119   |  |   |   |              |  |  |  |  |
| • —  | Acknowledgment is made of a claim for ☐ All b)☐ Some * c)☐ None of:   | r foreign priority   | under 35 U.S.C  | . § 119(a)-(d) or (f).  |              |  |  |  |  |
| ·  | 1. Certified copies of the priority documents have been received.   |  |   |   |              |  |  |  |  |
|  | 2. Certified copies of the priority documents have been received in Application No  |  |   |   |              |  |  |  |  |
|  | 3. Copies of the certified copies of  | the priority docu  | ıments have bee   | en received in this Nationa   | l Stage      |  |  |  |  |
|  | application from the Internationa   | l Bureau (PCT F  | Rule 17.2(a)).  |   |              |  |  |  |  |
| * 5  | See the attached detailed Office action f   | for a list of the co   | ertified copies ne  | ot received.  | •            |  |  |  |  |
|  |   |  |   |   |              |  |  |  |  |
| Attachmen  | it(s)   |  |   |   |              |  |  |  |  |
| · <del></del>  | ce of References Cited (PTO-892)  |  | · <del>-</del> -  | w Summary (PTO-413)   |              |  |  |  |  |
| 3) 🔲 Infor   | ce of Draftsperson's Patent Drawing Review (PTC) mation Disclosure Statement(s) (PTO-1449 or PT   | •  | 5) Notice of  | o(s)/Mail Date of Informal Patent Application (PT   | O-152)       |  |  |  |  |
| Paper No(s)/Mail Date 6) Other:                      |   |  |   |   |              |  |  |  |  |

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## **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments filed October 18, 2005 have been fully considered but they are not persuasive.

Applicant, on page 15 of his response, argues that Masuda fails to disclose or suggest all of the features recited in the pending claims. Specifically, regarding claims 1, 35, 36, and 39 Masuda fails to disclose or suggest at least the feature of a controller, separate to the first entity, for requesting at least a portion of the amount of money to be reserved as a reserved portion and for controlling an allocation of the reserved portion between the plurality of services, as recited in claim 1 and similarly recited in claims 35, 36 and 39. However, the examiner disagrees. First, a prepayment control device 20, in figure 1, is a prepayment control network that describes more clearly in figure 14. The prepayment control device 20 includes an user request receiving device 21 and a prepayment control device 22. The function of the user request receiving means 21 checks subscriber's profile to determine whether or not the user is a prepaid subscriber. If the user is a prepaid subscriber, he/she is allowed to use the prepaid service, and if not, he/she is not permitted to use the prepaid service. On the other hand, the function of the prepayment control means 22 performs prepayment control over all prepaid services. The prepayment control 22 includes a process of allotting the balance of a prepayment to a plurality of prepaid services (multi prepaid services) to be conducted simultaneously and performs recalculation such that the balance is allotted equally to the individual prepaid services. To see in figure 1, the user request receiving device 21 and a prepayment control device 22 separate each other, but they connect to each other. The applicant's attention is directed to

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figure 1 of his invention, from section [0027] to [0035] and figure 14 of the reference Masuda, from section [0093] to [0114]. Second, It would have been obvious to one of ordinary skill in the art to modify Masuda (in figure 1) by separating the controller (prepayment control 22) and the first entity (prepayment control device 20), since applicant has not disclosed that separating the controller (prepayment control 22) and the first entity (prepayment control device 20) solves any stated problem and it appears that the technique described by Masuda would perform equally well if operated at the communication system.

Applicant, on page 15 of his response, argues that Masuda fails to disclose or suggest at least the feature of the first entity being configured to send information defining an amount of the reserved portion in a first form other than a monetary amount and the controller is arranged to convert information relating to the amount of the reserved portion to a second form as a monetary amount (underline added) as recited in claim 21 and similarly recited in claims 37, 38 and 40. However, the examiner disagrees. First, The prepayment control device 20 comprises an user request receiving 21, a prepayment control means 22, a prepaid service providing 23 and a handling confirming 24. The user request receiving means 21 receives the prepaid service connection request from a user terminal device 10. Before transferring packets, the prepayment control means 22 determines whether or not the current balance is sufficient to transfer all of the packets and calculates or allots the balance each time a prepaid service is started or disconnected, allotment settings in terms of the number of packets or communication time, etc. So that the prepayment control means 22 converts the current balance (amount of money) into the number of packets or communication time or data size (see section from [0039] to [0066] and from [0087] to [0114] of reference Masuda). Second, after transferring packets, the prepayment

control means 22 converts the remaining the number of packets or communication time or data size back to a monetary amount and compare the current balance to the threshold (balance equal to zero). If the current balance is sufficient, the prepaid service providing means 23 provides the prepaid packet communication service. If the current balance is insufficient, the handling confirming means 24 sends a notification that the current balance is insufficient to transfer the packets (see section from [0039] to [0066] and from [0087] to [0114] of reference Masuda).

Applicant, on page 16 of his response, argues that the Office Action admits that the cited references fail to disclose or suggest this feature by the indication that claim 29 recites allowable subject matter. This feature is incorporated into independent claims 21, 37, 38 and 40. Therefore, Masuda fails to disclose or suggest all of the features recited in claims 21, 37, 38 and 40. The examiner, however, disagrees. The claim 29 is objected, but the claim 29 depends on claims 28, 24 and 23. Therefore, the applicant should add all the limitations in claims 28, 24 and 23 to the independent claim 21.

Applicant is advised to clearly point out the first entity and the controller in the system, for example, to see the specification of the invention from section [0033] to [0058]. Applicant is also advised to particularly define the term "a first form other than a monetary amount".

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the 2. basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

<sup>(</sup>e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 10-28 and 32-46 are rejected under 35 U.S.C. 102(e) as being anticipated by 3. Masuda (Pub. No: 2003/0078031).

Regarding claim 1, Masuda communications system (fig. 14, [0093]) comprising: at least one user device 10, said at least one user device configured to access a plurality of services in a session ([0094]); a first entity including an information store for storing information defining an amount of money for said at least one user device ([0044], [0090] and [0095]. Inherently, the prepayment control device 20 includes a prepayment control 22 which stores the current balance of the user in order to determine whether or not the service may be provided to the user, please see fig. 1); and a controller 22, separate to said the first entity, for requesting at least a portion of said amount of money to be reserved as a reserved portion ([0046] to [0048]) and for controlling an allocation of said reserved portion between said plurality of services ([0047] and [0050]. Notice that, if the user currently receives two prepaid services at the same time. Hence, the balance is allotted equally to the individual prepaid services).

Regarding claim 2, Masuda discloses all the limitation in claim 1. Further, Masuda discloses a system wherein said reserved portion is divided into a plurality of parts between said plurality of services ([0050]).

Regarding claim 3, Masuda discloses all the limitation in claim 2. Further, Masuda discloses a system wherein said reserved portion is divided equally ([0047]).

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Regarding claim 4, Masuda discloses all the limitation in claim 2. Further, Masuda discloses a system wherein said reserved portion is reallocated between said plurality of services when at least one of said plurality of services uses up its part of said reserved portion ([0040]).

Regarding claim 5, Masuda discloses all the limitation in claim 1. Further, Masuda discloses a system wherein said reserved portion is allocated based on which of said plurality of services requires said reserved portion ([0049]).

Regarding claim 6, Masuda discloses all the limitation in claim 1. Further, Masuda discloses a system wherein said reserved portion is allocated dynamically ([0052]).

Regarding claim 7, Masuda discloses all the limitation in claim 1. Further, Masuda discloses a system wherein said reserved portion is allocated based on at least one of: service activity; **number of services**; and a unit cost of said plurality of services ([0050] to [0052]).

Regarding claim 8, Masuda discloses all the limitation in claim 1. Further, Masuda discloses a system wherein said controller is configured to monitor how much of said reserved portion has been used ([0040]).

Regarding claim 10, Masuda discloses all the limitation in claim 8. Further, Masuda discloses a system wherein said controller is configured to monitor how much of said reserved portion has been used by using information defining a cost of said plurality of services ([0050] to [0052]).

Regarding claim 11, Masuda discloses all the limitation in claim 10. Further, Masuda discloses a system wherein said information comprises a cost for one of a data or time unit ([0101]).

Regarding claim 12, Masuda discloses all the limitation in claim 1. Further, Masuda discloses a system wherein when said reserved portion is used up or has been at least partially used up a further portion of said amount of money is reservable ([0065]).

Regarding claim 13, Masuda discloses all the limitation in claim 1. Further, Masuda discloses a system wherein a plurality of said plurality of services is accessed simultaneously ([0039]. Notice that, the prepayment control means 22 determines whether or not the user currently receives two prepaid services at the same time, please see section [0045]).

Regarding claim 14, Masuda discloses all the limitation in claim 1. Further, Masuda discloses a system wherein said information store comprises one of: a monetary value; a data amount representative of said amount of money; a time representative of said amount of money; and an amount of a service access parameter ([0044] and [0050] to [0052]).

Regarding claim 15, Masuda discloses all the limitation in claim 1. Further, Masuda discloses a system wherein at least one of said plurality of services comprises an Internet service ([0116] and [0121]).

Regarding claim 16, Masuda discloses all the limitation in claim 1. Further, Masuda discloses a system wherein said controller comprises a plurality of entities (fig. 14, [0093]).

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Regarding claim 17, Masuda discloses all the limitation in claim 16. Further, Masuda

discloses a system wherein said plurality of entities comprises at least one of a traffic analyzer 31

and 32 (fig. 14, [0102] to [0103]) and a credit controller 20 (fig. 14, [0095] and [0114]).

Regarding claim 18, Masuda discloses all the limitation in claim 1. Further, Masuda

discloses a system wherein said controller comprises a credit controller 20 (fig. 14, [0095]).

Regarding claim 19, Masuda discloses all the limitation in claim 1. Further, Masuda

discloses a system wherein said at least one user device is arranged to access a plurality of

different service classed in a session ([0126]). .

Regarding claim 20, Masuda discloses all the limitation in claim 1. Further, Masuda

discloses a system wherein said controller is configured to store information relating to a cost of

said plurality of services ([0123]).

Regarding claim 21, Masuda a communications system (fig. 14, [0093]) comprising: at

least one user device 10, said at least one user device being configured to access a plurality of

services simultaneously ([0094]); a first entity 20 for storing information defining an amount of

money for said at least one user device ([0090] and [0095]. Inherently, the prepayment control

device 20 includes a prepayment control 22 which stores the current balance of the user, please

see fig. 1); and a controller for requesting reservation of at least a portion of said amount of

money as a reserved portion ([0046] to [0048]), wherein said first entity 20 is configured to send

information defining an amount of said reserved portion in a first form other than a monetary

amount (fig. 1 and fig. 14, [0094] to [0095]. Upon receiving a packet service request from the

user terminal device 10, the prepayment control device 20 sends the information about the

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current balance of the user (first form) to the gateway 32) and said controller 20 is arranged to convert information relating to said amount of said reserved portion to a second form as a monetary amount ([0090] and [0098] to [0102]. Inherently, the prepayment control device 20 converts the in current balance (first form) into volume of data or number of data packets (second form). Upon receiving a packet service request from the user terminal device 10, the prepayment control device 20 sends the current balance (in form of volume of data or number of data packets) to the gateway 32. Then, in accordance with current balance, the gateway 32 determines whether or not the service may be provided to the mobile device 10. Specifically, Masuda recite in section [0101] that Seq. 9a shows the case where the balance is sufficient to transfer data, and Seq. 9b shows the case where the balance is insufficient to transfer data).

Regarding claim 22, Masuda discloses all the limitation in claim 21. Further, Masuda discloses a system wherein said first entity is configured to store data defining an amount of said reserved portion ([0090] and [0095]. Inherently, the prepayment control device 20 includes a prepayment control 22 which stores the current balance of the user, please see fig. 1).

Regarding claim 23, Masuda discloses all the limitation in claim 21. Further, Masuda discloses a system wherein said first entity is configured to store a reference name in association with data defining the amount of said reserved portion ([0086]).

Regarding claim 24, Masuda discloses all the limitation in claim 23. Further, Masuda discloses a system wherein said data is one of a cost for a unit amount of a payment parameter of at least one service of said plurality of services ([0102] to [0102]. Specifically, Masuda recite in

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section [0101] that Seq. 9a shows the case where the balance is sufficient to transfer data, and Seq. 9b shows the case where the balance is insufficient to transfer data).

Regarding claim 25, Masuda discloses all the limitation in claim 24. Further, Masuda discloses a system wherein said payment parameter is data volume, time, or service parameter of at least one service of said plurality of services ([0101] and [0102]).

Regarding claim 26, Masuda discloses all the limitation in claim 23. Further, Masuda discloses a system wherein said reference name is a dummy APN ([0086]).

Regarding claim 27, Masuda discloses all the limitation in claim 23. Further, Masuda discloses a system wherein the reservation requested by said controller to said first entity comprises said reference name ([0086]).

Regarding claim 28, Masuda discloses all the limitation in claim 24. Further, Masuda discloses a system wherein said information in said first form comprises said unit amount ([0101]).

Regarding claim 32, Masuda discloses all the limitation in claim 21. Further, Masuda discloses a system wherein said first form comprises at least one of time, data volume, or service access parameter ([0101]).

Regarding claim 33, Masuda discloses all the limitation in claim 21. Further, Masuda discloses a system wherein said service access parameter comprises at least one of number of clicks or number of accesses ([0086]).

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Regarding claim 34, Masuda discloses all the limitation in claim 21. Further, Masuda discloses a system wherein said second form comprises monetary value, number of clicks and number of accesses ([0086] and [0101]).

Regarding claim 35, Masuda discloses a communications method comprising the steps of: accessing a plurality of services in a session ([0094]); storing at a first entity, information defining an amount of money for at least one user device ([0090] and [0095]. Inherently, the prepayment control device 20 includes a prepayment control 22 which stores the current balance of the user in order to determine whether or not the service may be provided to the user, please see fig. 1); requesting at a controller separate from said the first entity at least a portion of said amount of money to be reserved as a reserved portion ([0046] to [0048]); and controlling, at said controller an allocation of said reserved portion between said plurality of services ([0046] to [0048]).

Regarding claim 36, Masuda discloses a controller for use in a communications system comprising: at least one user device, said at least one user device being configured to access a plurality of services in a session ([0094]); and an information store for storing information at a first entity defining an amount of money for said at least one user device ([0090] and [0095]. Inherently, the prepayment control device 20 includes a prepayment control 22 which stores the current balance of the user in order to determine whether or not the service may be provided to the user, please see fig. 1), said controller being separate from first entity and being configured to request at least a portion of said amount of money to be reserved as a reserved portion and to control an allocation of said reserved portion between said plurality of services ([0046] to [0048]).

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Regarding claim 37, Masuda discloses a communications method comprising the steps of: accessing a plurality of services simultaneously ([0039] and [0045]); storing information defining an amount of money for at least one user device ([0090] and [0095]. Inherently, the prepayment control device 20 includes a prepayment control 22 which stores the current balance of the user in order to determine whether or not the service may be provided to the user, please see fig. 1); requesting a reservation of at least a portion of said amount of money as a reserved portion ([0046] to [0048]); sending information defining an amount of said reserved portion in a first form other than a monetary amount (fig. 1 and fig. 14, [0094] to [0095]. Upon receiving a packet service request from the user terminal device 10, the prepayment control device 20 sends the information about the current balance of the user (first form) to the gateway 32; and converting information relating to said amount of said portion to a second form as a monetary amount ([0090] and [0098] to [0102]. Inherently, the prepayment control device 20 converts the in current balance (first form) into volume of data or number of data packets (second form). Upon receiving a packet service request from the user terminal device 10, the prepayment control device 20 sends the current balance (in form of volume of data or number of data packets) to the gateway 32. Then, in accordance with current balance, the gateway 32 determines whether or not the service may be provided to the mobile device 10. Specifically, Masuda recite in section [0101] that Seq. 9a shows the case where the balance is sufficient to transfer data, and Seq. 9b shows the case where the balance is insufficient to transfer data).

Regarding claim 38, Masuda discloses a controller for use in a communications system comprising: at least one user device, said at least one user device being configured to access a plurality of services simultaneously ([0094]); and a first entity for storing information defining

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an amount of money for said at least one user device ([0090] and [0095]. Inherently, the prepayment control device 20 includes a prepayment control 22 which stores the current balance of the user in order to determine whether or not the service may be provided to the user, please see fig. 1), said controller being configured to request a reservation of at least a portion of said amount of money as a reserved portion ([0046] to [0048]), and to convert information defining an amount of said reserved portion in a first form other than a monetary amount received from said first entity to a second form as a monetary amount ([0090] and [0098] to [0102]. Inherently, the prepayment control device 20 converts the in current balance (first form) into volume of data or number of data packets (second form). Upon receiving a packet service request from the user terminal device 10, the prepayment control device 20 sends the current balance (in form of volume of data or number of data packets) to the gateway 32. Then, in accordance with current balance, the gateway 32 determines whether or not the service may be provided to the mobile device 10. Specifically, Masuda recite in section [0101] that Seq. 9a shows the case where the balance is sufficient to transfer data, and Seq. 9b shows the case where the balance is insufficient to transfer data).

Regarding claim 39, Masuda discloses a communications system comprising: accessing means for accessing a plurality of services in a session ([0094]); storing means for storing at a first entity, information defining an amount of money for at least one user device ([0090] and [0095]. Inherently, the prepayment control device 20 includes a prepayment control 22 which stores the current balance of the user in order to determine whether or not the service may be provided to the user, please see fig. 1); requesting means separate from said first entity, for requesting at least a portion of said amount of money to be reserved as a reserved portion ([0046]

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to [0048]); and controlling from said first entity means for controlling an allocation of said reserved portion between said plurality of services ([0046] to [0048]).

Regarding claim 40, Masuda discloses a communications system comprising: accessing means for accessing a plurality of services simultaneously ([0039] and [0044]); storing means for storing information defining an amount of money for at least one user device ([0090] and [0095]. Inherently, the prepayment control device 20 includes a prepayment control 22 which stores the current balance of the user in order to determine whether or not the service may be provided to the user, please see fig. 1); requesting means for requesting a reservation of at least a portion of said amount of money as a reserved portion ([0046] to [0048]); sending means for sending information defining an amount of said reserved portion in a first form other than a monetary amount (fig. 1 and fig. 14, [0094] to [0095]. Upon receiving a packet service request from the user terminal device 10, the prepayment control device 20 sends the information about the current balance of the user (first form) to the gateway 32); and converting means for converting information relating to said amount of said portion to a second form as a monetary amount ([0090] and [0098] to [0102]. Inherently, the prepayment control device 20 converts the in current balance (first form) into volume of data or number of data packets (second form). Upon receiving a packet service request from the user terminal device 10, the prepayment control device 20 sends the current balance (in form of volume of data or number of data packets) to the gateway 32. Then, in accordance with current balance, the gateway 32 determines whether or not the service may be provided to the mobile device 10. Specifically, Masuda recite in section [0101] that Seq. 9a shows the case where the balance is sufficient to transfer data, and Seq. 9b shows the case where the balance is insufficient to transfer data).

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Regarding claim 41, this claim is rejected for the same reasons as set forth in claim 8.

Regarding claim 42, Masuda discloses all the limitation in claim 41. Further, Masuda discloses a system wherein said requesting means is configured to monitor how much of said reserved portion has been used by using information defining a cost of said plurality of services ([0050] to [0052]).

Regarding claim 43, Masuda discloses all the limitation in claim 40. Further, Masuda discloses a system wherein said storing means comprises one of: a monetary value; a data amount representative of said amount of money; a time representative of said amount of money; and an amount of a service access parameter ([0038]).

Regarding claim 44, Masuda discloses all the limitation in claim 40. Further, Masuda discloses a system wherein said requesting means comprises a plurality of entities (fig. 1, [0036]).

Regarding claim 45, Masuda discloses all the limitation in claim 40. Further, Masuda discloses a system wherein said requesting means comprises a credit controller 22 (fig. 1, [0039]).

Regarding claim 46, Masuda discloses all the limitation in claim 40. Further, Masuda discloses a system wherein said requesting means is configured to store information relating to a cost of said plurality of services ([0090] and [0095]. Inherently, the prepayment control device 20 includes a prepayment control 22 which stores the current balance of the user in order to determine whether or not the service may be provided to the user, please see fig. 1).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the

manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda (Pub. No:

2003/0078031) in view of Wills et al. (Pub. No: 2004/0203585)

Regarding claim 9, Masuda discloses all the limitation in claim 8. But, Masuda does not

disclose a system wherein said reserved amount is monitored by periodically determining how

much of said reserved portion each of said plurality of services have used to provide a plurality

of values and summing the plurality of values.

In the same field of endeavor, Wills et al. disclose a system wherein said reserved amount

is monitored by periodically determining how much of said reserved portion each of said

plurality of services have used to provide a plurality of values and summing the plurality of

values ([0026]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the terminal device of Masuda by specifically including said

reserved amount is monitored by periodically determining how much of said reserved portion

each of said plurality of services have used to provide a plurality of values and summing the

plurality of values, as taught by Wills et al., the motivation being in order to provide notice to the

user that the user has a limited a mount of time left for use.

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6. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda (Pub. No: 2003/0078031) in view of Dannehr et al. (Pub. No: 2003/0037176)

Regarding claim 30, Masuda discloses all the limitation in claim 21. But, Masuda does not disclose a system wherein said first entity operates in accordance with a CAMEL protocol.

In the same field of endeavor, Dannehr et al. disclose a system wherein said first entity operates in accordance with a CAMEL protocol ([0007] and [0008])

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the terminal device of Masuda by specifically including first entity operates in accordance with a CAMEL protocol, as taught by Gonthier et al., the motivation being in order to provide the customer with operator-specific services.

7. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda (Pub. No: 2003/0078031) in view of Gonthier et al. (Pub. No: 2002/0116338).

Regarding claim 31, Masuda discloses all the limitation in claim 21. But, Masuda does not disclose a system wherein said controller operates in accordance with a RADIUS protocol.

In the same field of endeavor, Gonthier et al. disclose a system wherein said controller operates in accordance with a RADIUS protocol ([0023]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the terminal device of Masuda by specifically including controller operates in accordance with a RADIUS protocol, as taught by Gonthier et al., the motivation being in order to use for authentication of users and authorization of network access.

## Reasons Subject Matter

8. Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 29, the prior art record does not disclose nor fairly suggest a system wherein said controller is arranged to convert said unit amount to a corresponding monetary amount to provide said second form.

## **Conclusion**

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 751-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong

AU: 2688

Date: 11-24-2005

JEAN GELIN PRIMARY EXAMINER